

Appl. No. 10/607,578
 Reply to Office Action of February 18, 2005

Attorney Docket: P68915US0

Amendments to the Claims:

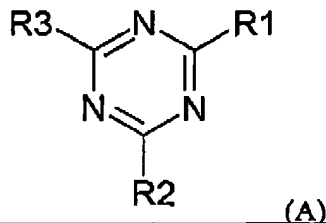
The listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

Claim 1. (currently amended) Heat-sensitive composition which forms an image without the removal of material, which does not require any developing treatment after the stage of exposure to heat and comprises:

- a) a switchable polymer, and
- b) an IR absorber,
- characterised in that it also comprises:
- c) a triazine compound, and
- d) a novolak resin; characterised in that the triazine compound has the structural

formula:



where at least one of the substituents R1, R2 and R3 is NR'R'' and the others are H or NR'R'' and at least one of the substituents R' and R'' is -CH₂-O-Alk₁₋₄C and the others R' and R'', which are the same or different from each other, are H or -CH₂-O-Alk₁₋₄C.

Claim 2. (previously presented) Heat-sensitive composition which forms an image without the removal of material, which does not require any developing treatment after the stage of exposure to heat and comprises:

- a) a switchable polymer,
- b) an IR absorber,

Appl. No. 10/607,578
Reply to Office Action of February 18, 2005

Attorney Docket: P68915US0

c) a triazine compound, and
d) a novolak resin; characterised in that the said switchable polymer has attached hydrophilic groups and becomes lipophilic through the effect of IR radiation.

Claim 3. (previously presented) Composition according to claim 2, characterised in that said attached hydrophilic groups are carboxyl groups.

Claim 4. (original) Composition according to claim 1, characterised in that the said switchable polymer is obtained by the acid hydrolysis of a copolymer of methyl vinyl ether and maleic anhydride.

Claim 5. (previously presented) Composition according to claim 1, characterised in that the quantity of said switchable polymer is from 50% to 75% by weight.

Claim 6. (previously presented) Composition according to claim 5, characterised in that the quantity of said switchable polymer is from 55% to 70% by weight.

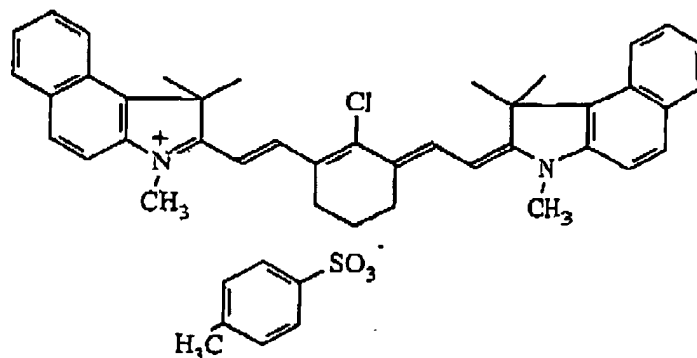
Claim 7. (previously presented) Composition according to claim 1, characterised in that the IR absorber is a cyanine dye.

Claim 8. (previously presented) Heat-sensitive composition which forms an image without the removal of material, which does not require any developing treatment after the stage of exposure to heat and comprises:

a) a switchable polymer,
b) an IR absorber,
c) a triazine compound, and
d) a novolak resin; characterised in that the IR absorber has the following formula

Appl. No. 10/607,578
 Reply to Office Action of February 18, 2005

Attorney Docket: P68915US0



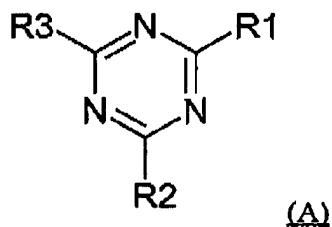
Claim 9. (previously presented) Composition according to claim 1, characterised in that the quantity of said IR absorber is from 1% to 12% by weight.

Claim 10. (previously presented) Composition according to claim 1, characterised in that the quantity of said IR absorber is from 5% to 10% by weight.

Claim 11. (currently amended) Composition according to claim 2, wherein Heat-sensitive composition which forms an image without the removal of material, which does not require any developing treatment after the stage of exposure to heat and comprises:

- a) a switchable polymer,
- b) an IR absorber,
- c) a triazine compound, and
- ~~d) a novolak resin; characterised in that the triazine compound has the structural~~

formula:



where at least one of the substituents R1, R2 and R3 is NR'R'' and the others are H or NR'R'' and at least one of the substituents R' and R'' is -CH₂-O-Alk₁₋₄C and the others R' and R'', which are the same or different from each other, are H or -CH₂-O-Alk₁₋₄C.

Appl. No. 10/607,578
Reply to Office Action of February 18, 2005

Attorney Docket: P68915US0

Claim 12. (currently amended) Composition according to claim ~~1~~11, characterised in that two of the substituents R1, R2 and R3 are NR'R''.

Claim 13. (currently amended) Composition according to claim ~~1~~11, characterised in that all three substituents R1, R2 and R3 are NR'R''.

Claim 14. (original) Composition according to claim 13, characterised in that the three R' substituents are H, two of the R'' substituents are -CH₂-O-CH₃ and the third R'' substituent is -CH₂-O-C₄H₉.

Claim 15. (original) Composition according to claim 13, characterised in that the three R' substituents are -CH₂-O-CH₃ and the three R'' substituents are -CH₂-O-CH₃.

Claim 16. (original) Composition according to claim 13, characterised in that the three R' substituents are -CH₂-O-CH₃ and the three R'' substituents are -CH₂-O-C₄H₉.

Claim 17. (original) Composition according to claim 12, characterised in that the two R' substituents are -CH₂-O-CH₃ and the two R'' substituents are -CH₂-O-C₄H₉.

Claim 18. (previously presented) Composition according to claim 1, characterised in that the quantity of said triazine compound is from 10 to 30% by weight.

Claim 19. (previously presented) Composition according to claim 1, characterised in that the quantity of said triazine compound is from 15 to 25% by weight.

Claim 20. (previously presented) Composition according to claim 1, characterised in that said novolak resin has a weight average molecular weight of between 2,000 and 14,000.

Appl. No. 10/607,578
Reply to Office Action of February 18, 2005

Attorney Docket: P68915US0

Claim 21. (previously presented) Composition according to claim 1, characterised in that said composition comprises at least two novolak resins, a first having a weight average molecular weight of between 3,000 and 5,000 and a second having a weight average molecular weight of between 6,000 and 11,000.

Claim 22. (previously presented) Composition according to claim 1, characterised in that the total quantity of novolak resin is from 1 to 20% by weight.

Claim 23. (previously presented) Composition according to claim 1, characterised in that the total quantity of novolak resin is from 5 to 20% by weight.

Claim 24. (previously presented) Negative lithographic plate comprising a substrate coated with a composition according to claim 1.

Claim 25. (cancelled)

Claim 26. (currently amended) Method for obtaining a negative image on a substrate coated with a composition which is first hydrophilic and then lipophilic after exposure to heat, without the removal of material, said method being characterised in that said negative image is obtained by applying an energy equal to or lower than 250 mJoule/cm² to said composition and Method according to claim 25, characterised in that said composition is a heat-sensitive composition which forms an image without the removal of material, which does not require any developing treatment after the stage of exposure to heat and comprises: a) a switchable polymer, and b) an IR absorber, characterised in that it also comprises: c) a triazine compound, and d) a novolak resin.

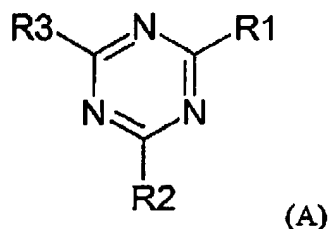
Claim 27. (cancelled)

Claim 28 (new) Composition according to claim 8, wherein said switchable polymer has attached hydrophilic groups and becomes lipophilic through the effect of IR radiation.

Appl. No. 10/607,578
Reply to Office Action of February 18, 2005

Attorney Docket: P68915US0

Claim 29 (new) Composition according to claim 8, wherein the triazine compound has the structural formula:



where at least one of the substituents R1, R2 and R3 is NR'R'' and the others are H or NR'R'' and at least one of the substituents R' and R'' is -CH₂-O-Alk₁₋₄ C and the others R' and R'', which are the same or different from each other, are H or -CH₂-O-Alk₁₋

4 C.